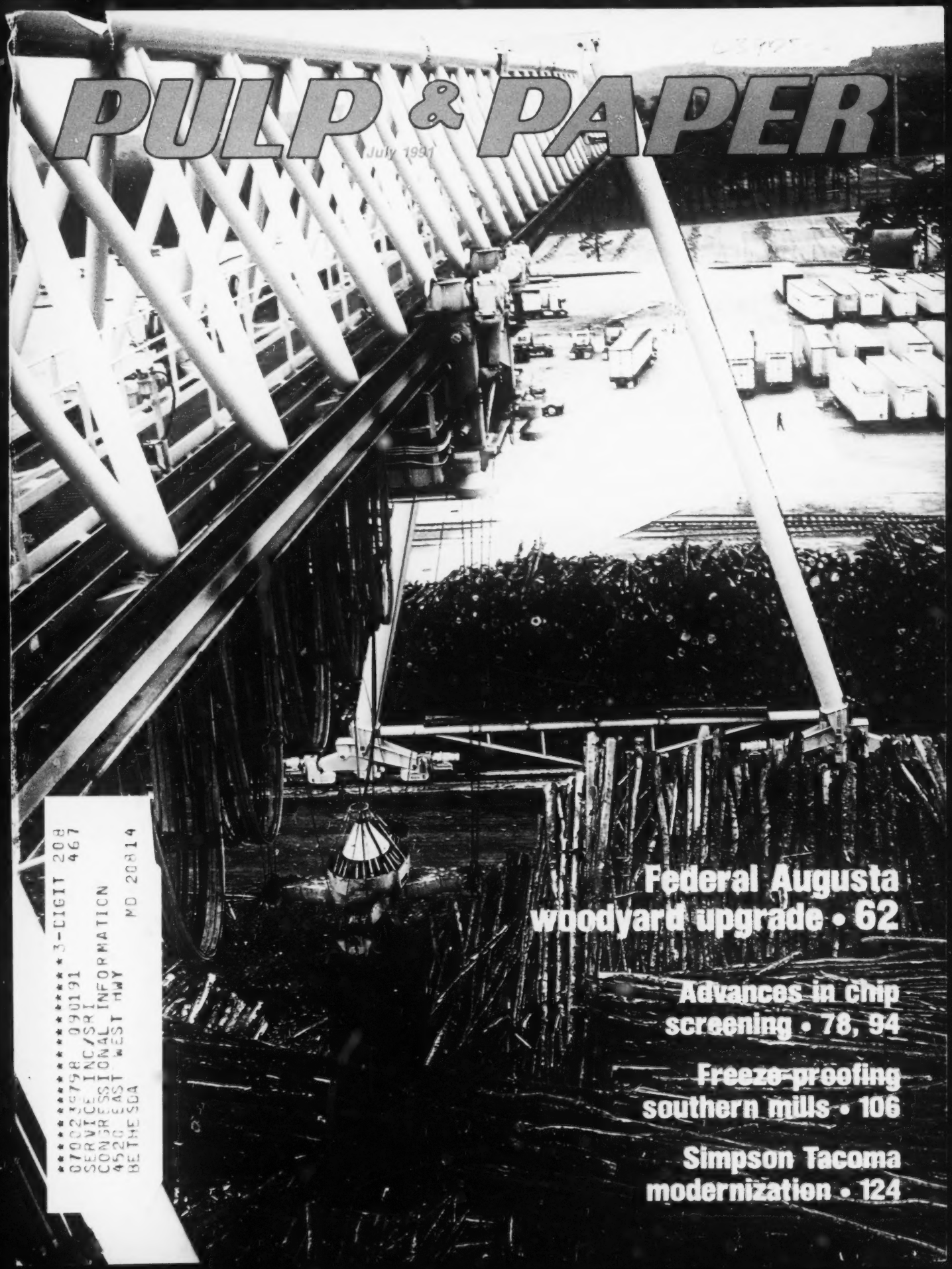
PULP & PAPER

July 1991



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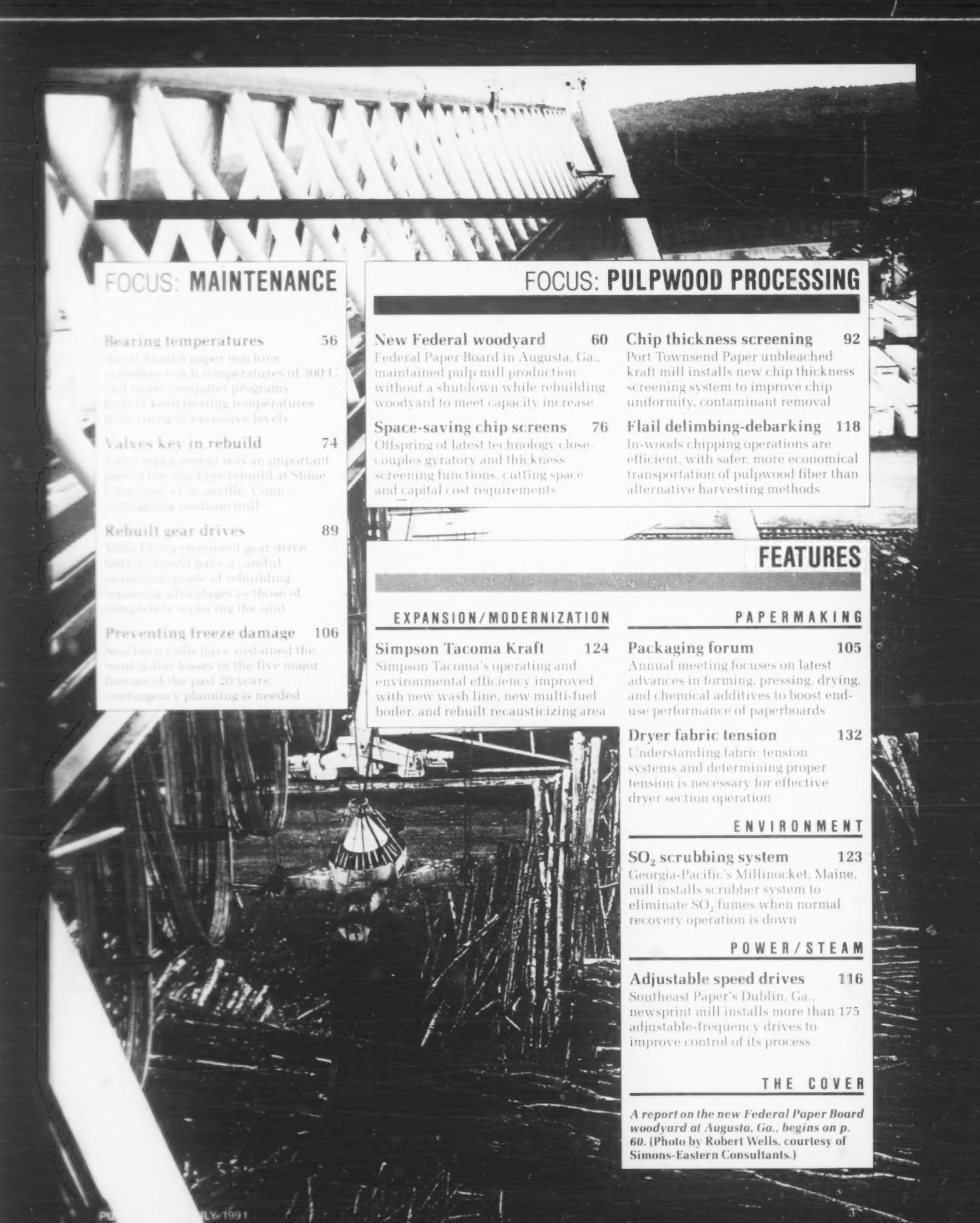

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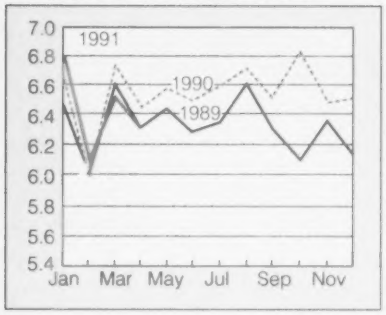
ABP

BPA

U.S. paper and board production



U.S. production of paper and paperboard totaled 6.3 million tons in April, according to the American Paper Institute, down 0.9% from the same month last year. The seasonally adjusted rate was 38.1 million tpy for paper, down 2.1% from a year earlier, and 39.4 million tpy for paperboard, up 1.0%. Much of the weakness in paper was concentrated in the printing/writing grades, API reported. Paperboard benefited from a 12.6% increase in production for export and a large increase in folding boxboard production due to the startup of Mead Corp.'s new machine in Mahrt, Ala.

Among major grades, printing and writing papers were off 5.4% from last year due to recession-related cutbacks in all major end-use categories. Containerboard production for domestic use was up just 0.2%, but production for export rose 15.7% through April. Market pulp production posted a 3.5% gain during the first quarter.

Canadian newsprint shipments totaled 748,000 metric tons in March, down 9.3% from a year earlier (April figures were unavailable at press time). Woodpulp shipments dropped 9.2% to 593,000 tons. Shipments through the first quarter were off 2.1% for newsprint and 3.7% for market pulp. ■

	Latest month (000 short tons)		% change from year ago	Annualized year-to-date (000 short tons)	% change from year ago
PAPER & PAPERBOARD PRODUCTION[1]					
Newsprint	Apr.	573	5.9	6,739	4.6
Uncoated groundwood (s)	Apr.	130	-7.1	1,661	-5.3
Coated paper (s)	Apr.	553	70.7	7,014	-4.0
Uncoated free-sheet (s)	Apr.	904	-6.6	10,900	-6.0
Other printing/writing	Apr.	128	300.0	1,531	-5.8
Total packaging and other paper (s)	Apr.	381	0.5	4,558	0.1
Tissue	Apr.	477	2.1	5,781	1.8
Total paper	**Apr.**	**3,146**	**-0.7**	**38,187**	**-2.0**
Unbleached kraft paperboard	Apr.	1,595	-2.0	20,231	2.4
Semichemical medium	Apr.	463	-0.6	5,649	0.6
Bleached paperboard	Apr.	9	-97.6	-4,557	0.5
Recycled paperboard	Apr.	730	-0.1	8,860	-1.5
Total paperboard	**Apr.**	**3,167**	**-1.1**	**39,296**	**1.0**
Total U.S. paper and paperboard output	**Apr.**	**6,313**	**-0.9**	**77,482**	**-0.5**
PULP, WASTEPAPER & FIBER[2]					
Total U.S. woodpulp production	Mar.	5,316	0.8	63,710	2.0
Market pulp production	Mar.	744	2.3	9,057	3.5
Wastepaper consumption at paper/board mills	Mar.	1,817	0.7	21,208	3.8
Pulpwood consumption (cords)	Mar.	8,161	-2.2	100,308	0.3
CONVERTED PRODUCTS STATISTICS[3]					
Corrugated box shipments (billion ft²)	Apr.	28.033	4.3	104.130[6]	-1.7
Containerboard inventories at U.S. box plants and mills	Apr. 1	2,995	14.0		
INTERNATIONAL TRADE[2]					
U.S. paper imports (including products)	Mar.	988	-14.2	12,406	-5.9
Imports of Canadian newsprint	Mar.	624	-13.6	7,821[6]	-7.1
U.S. paper exports (including products)	Mar.	722	20.9	8,047	19.9
Exports of unbleached kraft linerboard	Mar.	288	23.1	3,124	22.2
Exports of woodpulp	Mar.	600	3.8	6,245	10.9
Norscan pulp inventories[4]	Apr. 30	1,559	12.3		
Norscan pulp operating rates[4]	Apr.	85%	88%	98%	90%
CANADIAN STATISTICS[5] *(reported in metric tons)*					
Total newsprint shipments	Mar.	748	-9.3	2,211[6]	-2.1
Operating rates	Mar.	90%	95%	93%	94%
Inventories held by U.S. consumers	Mar. 31	1,430	13.8		
Other paper/board shipments	Mar.	593	-9.2	1,757	-3.7
Woodpulp shipments (export only)	Mar.	721	3.3	2,101	9.4
Operating rates	Mar.	92%	90%	92%	93%

1. American Paper Institute. 2. API, Bureau of Census, American Pulpwood Assn. 3. Fibre Box Assn., Paperboard Packaging Council. 4. North American/Scandinavian paper-grade market pulp. 5. Canadian Pulp & Paper Assn. 6. Not annualized. (s) = Shipments

Bleached paperboard: Producers are adding capacity to meet demand for SBS packaging

Grade structure: Solid bleached sulfate (SBS) paperboard is used primarily for folding carton and milk carton packaging. SBS is a premium cartonboard stock made from a furnish containing at least 80% virgin-bleached woodpulp. It is also used for cups and plates, food containers, and preprint linerboard. Calipers range from 12 to 28 pt, in low, medium, and high density, and basis weights vary from 40 to 100 lb/1,000 ft². Most SBS is clay coated for retail packaging or polyethylene coated for food packaging.

Markets: The major markets for SBS are folding boxboard, 51.3%; milk carton and food service, 39.5%; linerboard, 3.6%; and other packaging, 5.6%. These figures represent the 1991 capacity allocations published by the American Paper Institute. Some lightweight SBS board is also used for specialty printing applications, such as baseball cards.

Production/capacity: Total SBS production in 1990 declined 2.7% to 4.399 million tons. The decline in output was caused by several machines being temporarily idled for major rebuilds. International Paper Co., Federal Paper Board Co., Potlatch Corp., and Georgia-Pacific Corp. all took downtime to improve product quality and raise capacity. These projects are all scheduled to be completed by mid-1991. Last year, some machine capacity was reallocated from production of bleached packaging paperboard to bleached printing bristols and bleached market pulp.

In 1991, total SBS capacity is projected to increase by 4.8% to 4.843 million tons. Capacity will remain at approximately this level until late 1993, when Westvaco Corp. is scheduled to complete construction of a new 350,000-tpy SBS board machine at its Covington, Va., mill.

Several mills that produce SBS packaging board also manufacture lightweight bleached bristols used by commercial printers for paperback book covers, greeting cards, postcards, tickets, etc. Total bleached bristol capacity is projected to increase by 3.4% to 1.412 million tons in 1991. In 1990, bristol production increased by 2% to 1.188 million tons, and 1991 production should be about the same. Bleached bristols are not included in the bleached packaging board capacity and production figures.

Outlook: A modest recovery in consumer spending and retail sales in second-half 1991 will improve demand for all grades of paperboard packaging. This should boost domestic shipments of SBS folding carton, milk carton, and food service packaging by about 2 to 3%. Exports also will remain strong, showing about 3 to 5% growth because U.S. mills are the major suppliers of bleached paperboard used for liquid packaging worldwide. At the same time, the completion of major capital programs will remove the capacity constraints that have limited growth in the past two years.

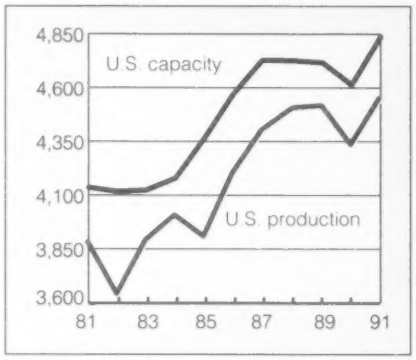
Assuming that an economic recovery begins in the second half of this year, total SBS production is forecast to increase about 3.6%. If the national economy recovers at a slower pace, SBS production will increase only 2 to 2.5% above the 1990 level. Since SBS capacity will increase by nearly 5% in 1991, SBS operating rates are forecast to decline to 94%.

Prices: All major SBS cartonboard producers have announced price increases amounting to about $40/ton. The first price hikes were scheduled to take effect beginning June 1, 1991. Because the effort to raise prices has received industry-wide support, it is reasonable to expect that the price of premium SBS clay-coated folding cartonboard will increase from $830/ton to $870/ton in 1991. The last price increase for these grades was a $50/ton hike in August 1989.

Bristol prices increased about $40/ton in April 1991, when the first effort to raise cartonboard prices was made but rejected by customers. The benchmark price for 10-pt coated one-side printing bristols is now approximately $1,070/ton (rolls).

Historical prices for solid bleached, clay-coated, 15-pt folding carton boxboard (rolls, $/short ton, year-end prices) are as follows: 1980, $550; 1981, $625; 1982, $590/625; 1983, $590/625; 1984, $590/665; 1985, $500/590; 1986, $580/590; 1987, $635; 1988, $730; 1989, $830; 1990, $830. ■

SUPPLY/DEMAND (000 tons)



FORECAST (000 tons)

U.S.	1989	1990	1991
Production[1]	4,521	4,399	4,557e
Capacity[1]	4,723	4,619	4,843
Utilization rate	95.7%	95.2%	94.1%
Imports	20	40	30
Exports	693	734	755
Apparent U.S. consumption	3,848	3,705	3,832
lb/capita	31.0	29.7	30.6
GNP ratio[2]	0.93	0.89	0.91

1. American Paper Institute production, capacity data.
2. 000 tons/$ billion real GNP.
e = *Pulp & Paper* estimate.

TOP U.S. PRODUCERS (000 tpy)

	Annual capacity (000 tons)	Market share (%)
1. International Paper[1]	905	18.7
2. Federal Paper Board	680	14.0
3. Westvaco	620	12.8
4. Potlatch	554	11.4
5. Georgia-Pacific	370	7.6
6. Temple-Inland	300	6.2
7. James River	270	5.6
8. Champion International	265	5.5
9. Gulf States Paper	230	4.8
10. Weyerhaeuser	230	4.8
11. Gilman Paper	200	4.1
12. Jefferson Smurfit/CCA	185	3.8
13. Union Camp[2]	140	n.a.

Market share of top five companies: **64.6%**

Market share of top ten companies: **91.4%**

Total U.S. capacity (1991): **4.843 million short tons**

1. Will take 44 days downtime to complete Texarkana, Texas, machine rebuild. 2. Includes more than 50% board/bristol swing capacity. n.a. = not available.

TISSUE

Markets turn "squeezably" soft in recession

Tissue producers are being chilled by the recession following many years of slow but steady growth in the U.S. "What's happening in tissue is a lot better than linerboard or uncoated free-sheet," acknowledged George Adler, an analyst with Smith Barney, Harris Upham & Co. Nevertheless, tissue is "recession-resistant but not recession-proof." First-quarter earnings are down, and some major projects have been delayed or canceled, while new products have churned up competition and prices are static or slightly depressed. And the away-from-home market has suffered some because of its ties to employment and traveling.

Tissue production and consumption both grew each year from 1983 to 1990. Production in 1990 reached 5.802 million tons, according to the American Paper Institute. Analysts expect production will be in the range of 5.78 to 5.85 million tons this year. API figures indicate production in the first two months of 1991 was off 0.2% from the same period a year earlier, although Jeanne Carroll, an analyst with Morgan Stanley & Co. Inc., estimated production rose about 1% for the first quarter. Analysts estimate that 1990 capacity reached 5.97 million tons and operating rates stood at 96% to 97%; capacity should grow to 6.11 to 6.14 million tons this year for an operating rate of 95% to 96%.

On the whole, "the U.S. tissue market will remain favorable over the next few years because of limited new supply and favorable pricing of raw material," said Carroll. A number of tissue projects were announced last year, including two James River Corp. machines at Naheola, Ala., and Old Town, Maine; two Procter & Gamble Co. machines east of the Rockies; and a Scott Paper Co. recycled tissue mill in Kentucky, but "the only thing that has been put through is the second P&G Oxnard, [Calif.,] machine," Adler said. He dismisses these other projects as "posturing" and said they are "on the back burner." Evadna Lynn, analyst with Dean Witter, blames the delays on cash flow pressures at the companies and management's concern with the state of the economy.

Kimberly-Clark started it. "Domestic tissue markets have apparently become somewhat more competitive as demand from retailers has slowed a little," said Mark Diverio, an analyst with Shearson Lehman Brothers Inc. Increased supply is also at work. Kimberly-Clark Corp. shook up the business when it dove back into the U.S. premium consumer bath tissue market in 1990. Since then, "tissue producers have become more competitive from a pricing standpoint as Kimberly-Clark, P&G, James River, and [Scott] slug it out in the higher-quality bath tissue arena," Diverio said. The analyst said heavier promotional activity is now spreading beyond the south central and southeastern markets, where K-C's effort was initially focused, although Smith Barney's Adler said the competition has not yet reached the Northeast or the West Coast. However, it has prompted some national chains to buy tissue in the cheaper regions and ship it to other market areas for sale. The backlash against K-C is not limited to premium bath tissue, Adler noted. The towel market has also been affected, although diapers and facial tissue have so far been spared, he said (Kimberly estimates it holds 8% of the towel market).

Mark Rogers, an analyst with Prudential Securities, agreed. "Promotional activity has started to become more intense in the commercial and industrial [C&I] market as well." But Rogers added that both the fourth quarter and first quarter are traditionally slower months for the industry, and he expects industry earnings could improve in the second quarter if C&I promotion does not get out of hand. And Carroll pointed out that "with the U.S. tissue industry operating at 96% to 97% of capacity, we expect promotional activity to abate in a stronger economy in 1992."

The producer price index for tissue, which bounded up 10% in 1989, backed off to 7% growth last year and is hovering around 2% growth in first-quarter 1991. But this index does not reflect the impact of promotions. Dean Witter's Lynn said tissue producers' actual realizations "creeped up through most of last year but are probably down in commercial and premium bath tissue and relatively stable in the remainder of markets." Morgan Stanley's Carroll said con-

North American tissue expansions.

Company/mill	Annual capacity (short tons)	Startup date
Irving Tissue Co., St. John, N.B.	n.a.	1990
Atlantic Packaging Inc., Whitby, Ont.	30,000	1990
Kimberly-Clark Corp., Loudon, Tenn.	50,000e	1990
Kimberly-Clark Corp., Jenks, Okla.	75,000	1990
Cascades Corp., Kingsey Falls, Que.	28,000	1990
Wisconsin Tissue Mills, Menasha, Wis.	80,000	1990
Putney Paper Co. Inc., Putney, Vt.	5,000[1]	1990
Pope & Talbot Inc., Ransom, Pa.	7,000[1]	1990
Canadian Pacific Forest Products Ltd., Toronto, Ont.	n.a.	1990
Scott Paper Co., Chester, Pa.	20,000	1990
Perkins Papers Ltd., Candiac, Que.	48,500	1991
Fort Howard Corp., Rincon, Ga.	88,000	1991
Scott Paper Co., Chester, Pa.	n.a.	1991
Mosinee Paper Corp., Middletown, Ohio	90,000	1991
Procter & Gamble Paper Products Co., Oxnard, Calif.	85,000e	1992
Potlatch Corp., Lewiston, Idaho	39,000[2]	1992
Consumers Paper & Supply Corp., Redcliff, Alta.	28,000	1992
Kimberly-Clark Corp., Loudon, Tenn.	50,000e	1993
Fort Howard Corp., Green Bay, Wis.	n.a.	1993

n.a. = Not available. e=Estimate.
1. Estimated capacity addition from rebuild.
2. Net capacity addition.

Source: *Pulp & Paper Week*; analyst estimates.

sumer tissue realizations are down 1% to 2%, excluding premium bath tissue. In the South, smarting from K-C's new product, premium consumer bath tissue transaction prices are probably 20% below normal, and in other regions they are down just 8% to 10%, she said. Lower-end commodity grades in the away-from-home market have seen some price slippage since the third quarter, but "the rest of the grades are holding up well in the first quarter," she added. An across-the-board price increase of 3% to 5% announced in the fourth quarter will be "hard to get now because of the weaker economy." With most producers running "close to full out," Carroll expects trade allowances to drop off fairly quickly when the economy turns around.

Times tough for now. While Scott's unit volume in first-quarter 1991 remained nearly even with first-quarter 1990, the firm's U.S. tissue operating income dropped 10%. It should be noted, however, that 1990 was a record year for the firm in terms of U.S. tissue earnings; unit sales were essentially level with 1989, but the average selling price for consumer and commercial tissue rose about 4%, Scott said. The company said that its performance in the U.S. tissue business during the first quarter was "negatively impacted by strong competitive activity across the business."

Scott shut down its mill in Winslow, Maine, from June 23 to July 8 to work down inventory; the facility produces some basesheet for the firm's Westbrook, Maine, printing papers mill but is primarily focused on commercial tissue (a spokesman said that such downtime is not unusual for Scott as a whole). Scott has delayed its $200-million Owensboro, Ky., tissue mill project, saying in its annual report that construction will begin in 1992 rather than this year as it had originally indicated.

Sometime this year the company plans to start up a rebuilt machine at its tissue and toweling mill in Chester, Pa., where another rebuilt machine that had been idled went online toward the close of last year. Dean Witter's Lynn estimates that the first rebuild added 20,000 tpy. Scott continues to divest units in order to focus on its core businesses, which include commercial and consumer sanitary tissue, wet wipes, and wipers, so it can "improve future earnings, cash flows, and returns."

Mosinee Paper Corp. expects Bay West's rebuilt No. 1 60,000-tpy machine to start production of commercial toweling stock in the third quarter at its Middletown, Ohio, mill, along with more deinking capacity. Installation of a new "world class" 30,000-tpy twin-wire tissue machine is due there late in the year. Mosinee said mill production will be sufficient to supply the converting operation at double its 1990 output of 42,000 tpy. And once integration is complete the company can stop buying parent rolls of towel and tissue stock from competitors, "drastically" reducing raw material costs. The company noted that relocation of its converting operation from Wisconsin to Kentucky, near the Middletown mill, will yield savings in freight, labor, and other business costs.

Kimberly-Clark enjoyed gains in shipments of children's training pants and feminine care and bathroom tissue products in the U.S. as well as Canada and overseas during the first quarter. K-C, which buys 650,000 tons of pulp each year, has benefited from sinking pulp prices, noted Oppenheimer & Co. Inc.

On the other hand, the company's introduction of premium consumer Kleenex bath tissue, made at the new Jenks, Okla., facility, is expected to help drain away $1.08 billion in total promotional costs this year on top of the $985 million spent last year, this analyst said. K-C plans to start up a third tissue machine at its new Loudon, Tenn., mill, along with related deinking and converting equipment. Carroll predicts the machine could come on in first-half 1993 with capacity of 50,000 tpy. The facility produces 100%-recycled Surpass and Regard brand commercial bathroom tissue.

James River's first-quarter consumer products sector in the U.S. was impaired by "increased competitive activity in the retail area as well as weakening markets in the commercial side of the business." And James River warns that "additional industry capacity is expected later in 1991 for... tissue, which, coupled with continued recessionary pressures, may cause results to continue to be depressed until market growth capacity.

Procter & Gamble confirmed it is going ahead with its Oxnard tissue mill expansion, although timing is not yet definite. A team evaluating a $250-million project involving two new machines at an existing plant east of the Rockies has so far made no recommendation.

Canadian blues. As in the U.S. this sector is sagging in Canada. In spite of the drop in raw material costs, finished product prices are dropping faster, noted one industry observer. Scott Paper Ltd. said competition is heating up in the Canadian tissue market. Its consumer tissue sales are up but commercial sales are down. Scott Paper currently has more than half the total tissue sales in the country, according to the *Globe and Mail*, but president and CEO Robert Stewart said industry capacity will be 30% greater by mid-year than it was back in 1989. He said that expansion is "well in excess of total market growth during the same period" and more typically would have occurred over five years than two.

The new projects include four in 1990—at Irving Tissue Ltd., Canadian Pacific Forest Products Ltd., Atlantic Packaging Products Ltd., and Cascades Inc. This year Cascades Industries' Cascades Inc. division plans to market a bath tissue made with recycled fiber.

Canadian Pacific Forest Products said in its annual report that its tissue business, Facelle Co. Ltd., faced "aggressive competitive activity, increased industry capacity, and new competition from recycled products" last year. Sales were off slightly, but earnings stayed level with 1989, helped by dropping pulp prices and cost reduction measures. Facelle is working to raise capacity of No. 4 paper machine at its Toronto, Ont., facility. Tissue shipments reached 68,000 metric tons last year.

Perkins Papers Ltd. expects midsummer 1991 startup of a new 48,500-short-tpy tissue machine at its Candiac, Que., mill; this will relieve it from buying paper from outside suppliers. The company makes bath tissue, toweling, and napkins for commercial and consumer markets, primarily from 100%-recycled paper. Consumers Paper Corp. has targeted a 1992 startup for a paper recycling and tissue mill in Redcliff, Alta., with capacity of 25,000 to 28,000 metric tpy. ■